

REMARKS

Claims 1, 2, 5-12, 14, 16-20, and 22-25 are now pending in the application. Claims 1, 2, 9, 12, 19, 20, and 22-25 are currently amended. Support for the amendments can be found at least in Figures 4 and 5, and claim 12 as originally filed. No new matter has been added. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

ALLOWABLE SUBJECT MATTER

The Examiner states that after further consideration, the subject matter previously indicated as allowable is in fact obvious as a matter of design choice and spatial considerations. Applicants respectfully disagree based on the detailed comments set forth below.

REJECTION UNDER 35 U.S.C. § 103

Claims 1, 2, 5, 6, 8, 9, 12, 14, 16, 18-20, and 22-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Forster (U.S. Pat. No. 1,908,135). Claims 1, 2, 5, 6, 8, 9, 12, 14, 16, 18-20, and 22-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hollingshead (U.S. Pat. No. 5,186,620). Lastly, claims 1, 2, 5-12, 14, 16-20, and 22-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogden (U.S. Pat. No. 4,702,691). These rejections are respectfully traversed.

Specifically, the Office Action maintains that while none of the Forster, Hollingshead, or Ogden references particularly recite the claimed pockets, lips, flanges, or bracket arrangements of Applicant's burner, nevertheless, the claimed components and arrangements are obvious modifications based on design choice, and depend on spatial considerations. Further, in view of the absence *in the originally filed disclosure* of criticality for these particular designs, the Office Action maintains that it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate these claimed features because of spatial considerations (emphasis original). Applicants respectfully disagree.

At the outset, Applicants respectfully note that there is no legal requirement to provide discussions of the criticality of design features in originally filed patent disclosures. See, e.g., *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed.Cir. 1995). Notwithstanding, Applicants would like to specifically direct the Examiner to paragraphs [0005], and [0026] – [0028] of the disclosure as originally filed, which are believed to address certain of the Examiner's concerns. Thus, Applicants believe that more than adequate disclosure has been provided discussing the reasons and benefits of the claimed designs. Additionally, spatial consideration is merely one aspect that results from the novel, reasoned, and meaningful claim recitations.

In regard to the shape of the nozzle tube (32) recited in claims 2, 9, and 12, these claims have been amended herein to more particularly point out the present design of having an upstream end and a downstream end wherein the upstream end has a larger diameter than the downstream end. This larger diameter lowers the velocity of the gas mixture exiting the ports and makes the burner operation quieter, minimizes lift-off, and

lowers emissions from the burner (see *e.g.*, paragraph [0026]). Neither the Forster, Hollingshead, nor Ogden references provide such a nozzle tube design, nor do they provide any motivation to alter a nozzle tube design to address burner operation, lift-off, or emissions. With reference to paragraph 6 of the Office Action, it is also noted that Hollingshead does not even provide for a separate tube member element as recited in the present claims; rather, the alleged tube member is actually an integral portion of Hollingshead's version of a disc-like member.

In regard to mounting brackets, Applicants note that independent claims 1, 9, 12, 19, 20, 23, 24, and 25 each recite a specific bracketing arrangement which is not disclosed, taught, or suggested by the cited references. Additionally, there is no teaching or suggestion in the cited references that would lead one of ordinary skill to modify the prior art references to achieve a bracket having the presently claimed features. For example, the flange portion recited in claims 8, 18, and 23-25 allows the burner to be located in a burner box. In the embodiments of claims 1, 14, 19, and 22, the flange creates a pocket between the top and bottom bracket that directs the gas from the side ports of the burner to provide the ability of chain lighting. In other embodiments of claims 5, 9, and 12, a lip portion, defined by a turned up flange in front of the bracket, extends over the nozzle tube and helps minimize lift-off and reduce noise (see *e.g.*, paragraph [0027]). None of the Forster, Hollingshead, or Ogden references provide any such specific bracketing arrangement. Thus, the cited references would also not be able to provide any motivation to modify a bracket to arrive at the presently pending claims.

In regard to the burner nozzle assembly, Applicants note that claims 1, 9, 12, 19, 20, and 23-25 have been amended to more particularly point out that the disc-like member

is *generally planar* as illustrated in at least Figures 4 and 5. As those of ordinary skill in the art understand, and as disclosed in the cited references, the shape and design of such a member has a direct influence on the velocity of the exiting gas mixture and affects the noise and efficiency of the burner. With reference to paragraph 7 of the Office Action, it is also noted that Ogden does not even provide for a disc-like member element as recited in the present claims; rather, the alleged disc-like member is actually an end cap having a hollowed out space.

Lastly, with regard to the claim 20, the Office Action maintains that it is inherent that the relative position of the tube is “predetermined”, so as to attain the desired flow parameters. Applicants note that claim 20 has been amended to more particularly point out that the nozzle tube of the present disclosure is *adjustable*, and can be specifically tuned to increase the burner efficiency and reduce emissions as discussed in paragraph [0028] as originally filed. Accordingly, the axial position of the nozzle tube relative to the generally planar disc-like member can be specifically determined and adjusted for different applications. Neither the Forster, Hollingshead, nor Ogden references provide such an adjustable nozzle tube design.

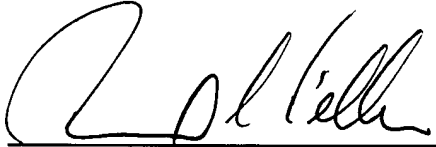
Accordingly, for all of these reasons, Applicants submit that the present claims are not anticipated by the Forster, Hollingshead, or Ogden references and request reconsideration and allowance of the claims.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

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Respectfully submitted,

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